

# SCIENCE NEWS INDEX

Vol 115, Nos. 1-26, Jan.-June, 1979, pp. 1-432

Science Service, Washington, D. C. 20036

## A

ARIES	58
Abalone	374
Abe, Katsuyuki	344
Aborigines, Australian	252
Aborigines, Induced	313
Abrams, David B.	56
Abiotic acid	166
Accelerators	185
Accelerators, Japanese	234
Accretion disk	118
Acorn woodpecker	8
Acupuncture	140, 167
Adenovirus, John A.	54
Adrenalin	280
"Aether drift" experiment, Modern	157
Afar Ape-man	36, 196, 362
Afar Triangle	344
Agencies' regulations	40
Aging	284
Agoraphobia	340
Ahner, Russel	281
Air pollution	56, 101, 342
Air turbulence	169
Alarm, Chemical	394
Alaska lands bill	360
Albanese, Frank N.	153
Alberta Oil Sands Technology and Research	387
Albert, Ron	170
Albuquerque, Edson X.	326
Alcohol, Drinking	200
Facial flushing	280
Heart disease	280
Intoxication	46
Pregnant women	41
Sexual arousal	56
Worldwide problem	167
Alcohol fuels	404
Alcoholism	6, 152
Alexander, Paul E.	232
Algae, Blue-green	247
Algae, Marine	189
Algae, Red	374
Alguard, M. J.	311
Allard, P.	344
Allen, Bryan	390
Allen, C. C.	199
Allergy, Cockroach	328
Alligator	246
Alone, Luigi	164
Alpha chymotrypsin	121
Aluminum	284
Alvarez, Luis	356
Alvarez, Walter	356
Alzheimer's disease	284
Amantadine	147, 164
Amanita	168
American Institute of Physics	168
American Univ. Caribbean School of Medicine	153
Aminoglycoside antibiotics	88
Amniocentesis	230
Amory, Cleveland	203
Amphipod	310
Amputation, Leg	135
Anderson, Roger N.	393
Andre, C. G.	198
Andreasen, A. S.	326
Andrew, E. Raymond	380
Anemia	40
Aneshansley, Daniel	330
Anesthetics, Childbirth	40
Angel, Roger	357
Angier, John	365
Animal feed drugs	422
Anlyan, William C.	231
Annexstad, John O.	117
Anorexia nervosa	376
Ant, Fire	88
Antarctic meteorites	117
Antarctica	22, 56
Antibiotics	422
Antibodies	182
Antibodies, Monoclonal	262
Antidepressant drugs	345
Antiquark	296
Ape-man, Afar	36, 196, 362
Apfel, Robert E.	89
Apnea	57
Appalachian Mountains	374
Apple, J. C.	13
Appel, Kenneth	412

## B

Arai, Satoaki F.	296
Archaeopteryx	167
Archer, Victor E.	284
Arctic	56, 185
Arceio antenna	116
Arizona meteor crater	424
Armonica plate	373
Arnold, Richard C.	402
Arnold, Ted	402
Arrhenius, Gustaf	189
Arsenic	189
Arsenobetaine	291
Art, Prehistoric	241, 252
Arthritis, Lyme	87, 391
Asaro, Frank	356
Asbestos	376
Asteroids	121, 424
Astronauts, Ancient	201
Athletes, Female	359
Atkinson, Richard C.	51
Atlantic Coastal Plain	312
Atmosphere, Upper	117
Atmospheric chemistry	325
Atom motion, Single	392
Attrep, Katherine	265
Attrep, Moses	265
Auerbach, Oscar	168
Aurora	49, 51
Australopithecus	39, 196, 362
Australopithecus boisei	362
Automobile, Electric	422
Automobiles, Alcohol-powered	312, 404
Aviram, Ari	7
Awards, Scientific	120
Axelrod, Julius	218
Axelson, Olav	247, 264
Axion	89
B cells antigen	200
BEIR committee	310, 360
Babcock & Wilcox Co.	292
Babies	40, 41
Bacillus thuringiensis	266
Bacteria, Magnetotactic	278
Bacteria in bedrock	24
Bachall, John	103
Bainbridge, William Sims	201
Baker, Howard	55
Baker, Victor R.	53
Ballard, Robert D.	327
Balonnek, T. J.	57
Baltimore Canyon	73
Band-aid-like device	102
Ban-Nun, Akiva	312
Barbiturates	135
Barker, Roy J.	388
Barnea, Joseph	326
Barrett, Charles P.	328
Barrier islands	1, 10
Barron, Deborah	293
Baruch, Jordan	423
Baryon conservation	248
Basalt	377
Batra, Suzanne W. T.	329
Batson, Raymond M.	391
Bauminger, Sara	105
Baxter, John D.	39
Beaches, Barrier	1, 10
Beauchamp, Gary	390
Becklin, E. E.	172, 259
Bedrock	24
Bedson, Henry	54
Beer	40
Bees	135, 329
Beetles, Bombardier	321, 330
Bell, Peter M.	156
Belsey, Mark	247
Benson, Andrew A.	71, 189
Benzaldehyde	71
Benzer, Seymour	250
Benzodiazepines	231
Benzquinones	330
Berman, B. L.	311
Berndt, Martin	180
Bernero, Robert	228
Bertram, Brian C. R.	423
Beta-asarone	280
Beta endorphin	38
See also: Endorphins	
Beta endorphin	38
Bethune, Donald S.	406

## C

Bezoar stones	189
Bienlein, J. K.	191
Bildstein, K. L.	391
Binder, Alan	198
Biochemical fossil	70
Bioluminescence	88
Bipedalism	362
Bison fossil bones, Alaska	311
Black, Richard G.	333
Black hole	197
Blackbody radiation	37, 260
Blakemore, Richard P.	278
Blattner, William A.	57
Block, Eric	265
Blood, Maternal	230
Blood acetaldehyde concentrations	6
Blood-cell changes	133
Blood flow abnormalities	284
Blood pressure	265
Blood pressure drug	309
Blood samples	136
Blood substitute	280
Bloom, Floyd E.	38
Bloom, S. D.	311
Blum, Barbara	350
Blumberg, Baruch	248
Blumenthal, Michael	72
Bock, Carl E.	8
Bohr, Niels	212
Boldt, Elihu	277
Boll weevil	257, 266
Bombardier beetles	321, 330
Bond, Victor	329
Bone-destrating diseases	181
Bone marrow transplants	328
Bones, Old	293
Bonica, John J.	332
Bonn, Ron	361, 365
Bonnichsen, Robson	311
Booy, Emmy	24
Borgeat, Pierre	392
Bosons	214
Bowman, J. D.	134
Box, Judith M.	201
Boy offspring	135
Boys, Edward A.	423
Brace, C. Loring	364
Brackbill, Yvonne	40
Brain, Joseph D.	296
Brain aneurysms	308
Brain grafts, Animal	308
Brain hemispheres	375
Brain-wave measurement, Infant	152
Brandom, William P.	133
Brazil	404
Breast removal, Partial	389
Breeding, Cooperative	423
Bremsstrahlung radiation	49, 51
Bretherton, Francis	244
Bridges, Patricia M.	391
Brillet, A. M. B.	157
Brodehead, J. M.	10
Broom, Sarah H.	40
Brome, Claire V.	4
Brown, James M.	266
Brown, Robert	403
Bruland, W.	281
Bubble chamber, Pocket-size	89
Buckley, Francine	10
Buckley, P. A.	10
Buckton, K. E.	133
Budget 1980	51
Bull, Joan A.	168
Bunney, William E., Jr.	232
Burant, Charles F.	280
Burdick, Bruce	395
Burgess, J. Wesley	122
Burghardt, Gordon	390
Burma	310
Burnham, Drusilla	168
Burrell, C. J.	344
Burton, Gerardo	379
Busby, Chris	276

## D

Calaprice, F. P.	89
Califano, Joseph A., Jr.	151
Callis, Linwood B.	405
Callisto	148
Climate	164, 231, 371, 391, 397
Climate program, World	184
Climate change	244
Climatic change	131
Clothing	342
Cloud chambers	380
Clow, Hugh	375
Clusen, Ruth	156
Coal	105
Cocaine	407
Cockroaches	295, 328
Cocobolo	280
Cohen, David	295
Cohen, Joel E.	41, 250
Cohen, Sheila M.	379
Cole, Rone	21
College examinations	56
College scholarship	376
Genetics	9
Combinatorics	250
Comets	424
Coming, David E.	20
Compazine	182
Computer	136
Concom, Jose M.	265
Conflict of interest law	103
Connelly, Robert	412
Continental drift	373
Continental margin, California	6
Contraceptive	102
Contraceptive, Oral	136, 247
Cook, Allan	172
Cook, Fred A.	374
Cooney, Joan Ganz	365
Cooney, Robert	189
Copulins	282
Corer, Hydraulic piston	85
Corn	24
Cosmic background radiation	260
"Cosmos"	361
Cotton	257, 266
Cotton pests	257, 266
Coughlin, James R.	265
Council of Economic Advisors	40
Covert, Eugene E.	132
Cowley, J. J.	283
Cox, D. R.	44
Coxsackievirus B4	337
Crabs, Hermit	234
Crafts, Roger C.	153
Cramer, Chris H.	56
Craters	198
Creativity	198
Creese, Ian	216, 395
Cressman, George R.	171
Cretaceous-Tertiary boundary rocks	356
Creutzfeldt-Jakob disease	41
Crib deaths	57
Crime victim	25
Crippen, Robert	5
Criswell, David R.	198
Cro-Magnon man	132, 250
Cronkite, Walter	361, 365
Cronmiller, Claire	61
Crops	360
Crouch, Jim	89
Crow, T. J.	325
Cruse, J. P.	37
Crutzen, Paul	169
Cults, Religious	184
Cultural-deviance theory	201
Curry, Joseph	86
Curtis, Garnis H.	363
Cutler, Elliot	72
Cyclones	276

Datz, Sheldon	311	<b>E</b>	Fault creeping	74	Gat, Joel	343	<b>H</b>
Davis, Joseph M.	261	Ear bone, Hominid	328	Fault movement	201	Gault, Donald E.	232
Davies, Brian	204	Earle, Sylvia A.	25	Feduccia, Alan	167	Gehring, Perry	166
Davies, Julian	118	Earth, Surveying of	58	Feed supplement	121	Geldzahler, B. J.	403
Davies, P. C. W.	86	Earth, Temperature balance	117	Feenay, Robert F.	265	Gendel, Steve	361
Davis, Glenn C.	332	Earth, Weight of	393	Feibelman, W. A.	261	Gene splicing	39, 150
Davis, Marc	389	Earthquakes		Feinberg, Gary	25	Gene translation	
Davis, Raymond	103	Alaska	185, 377	Feldman-Summers, Shirley	232	Animal by plant	8
Dead Sea	343	Biblical	377	Felig, Philip	182	Genetic diseases, Human	60
Dead Sea Rift	377	Forecasting	74, 185, 377	Fermions	214	Genetic manipulation	7
Death	230	Lake-level change	56	Ferrier, I. N.	325	Genetic mosaic, Human	70
Death, Near	106	Measurement	74, 344	Fertilization, Animal in vitro	101	Genetic mosaic, Mice	60
Death index, National	186	Northeast	281	Fertilization		Genetics, Cancer	
DeBard, Mark L.	85	Palmdale Bulge	74	Test-tube	101, 131, 183, 358	susceptibility	57
de Boer, Klass S.	388	Prediction	58	Fetal cells	230	Genetics, Disease	
de Bruyn, Peter P. H.	342	Research	65, 74, 81, 90	Fetoscscopy	422	susceptibility	21
deCasper, Anthony J.	56	Ring of Fire (Pacific)	393	Fetus		Genetics/scient	423
Deep sea drilling	6, 85	Eating, Compulsive	201	Immune suppression	105	Geodesy	58
Deep-water species	24	Eckhardt, Robert	364	Monitoring	183	Geometry	401, 412
Defocusing, Refractive	406	Eckholm, Erik	119	Occupational hazards	21	George, Stephen L.	133
Degenkolb, Henry J.	91	Eclipse, Total	137	Smoking imperils	55	Hamilton, G. E.	133
DeGroot, J. S.	57	Edelstein, Paul H.	9	Field, George B.	218	Hamsters	390
DeHerrera, John	107	Edelstein, Shmuel	181	Fire, Edward H.	261	Hanafusa, Hidesaburo	344
DeLong, S. E.	377, 393	Edgerton, Harold	331	Firearms, E. L.	117	Hanauer, Stephen H.	105
DeLuca, Hector F.	181	Edling, Christa	264	Firewood shortage	119	Hancock, J.	264
Dementia	284	Edman, John	329	Fisher, Bernard	389	Hanel, Rudolf A.	172
Demopoulous, Harry	411	Education Department	325	Fisher, Richard	314	Hanske, B.	281
Dennison, Charles S.	423	Eggs, Cholesterol level	344	Flax, A. James	244	Haq, Bilal U.	6
Dent, W. A.	57	Einstein, Albert	193	Flavor, Conservation of	134	Harbin, Henry T.	358
Denton, Harold	227	210, 212, 216, 218, 276		Flehmig response	390	Hardman, Joseph M.	155
dePaulo, J. Raymond	345	Eisenbud, Merrill	411	Flies, Black	329	Hardy, Janet B.	264
Depression	20, 284, 376	El-Sayed, Mostafa	342	Flight, Human-powered	390	Harrison, Paul R.	299
Derbenev, Ya. S.	42	El-Sayed, Mostafa	342	Flory, Paul J.	168	Harrison, Anna J.	220
Deshpande, Sharad S.	326	Electric-power lines	263	Fluorol-DA	280	Hart, Michael H.	121
Dessler, Alex	109	Electric charge, Fractional	38	Fluorazepam	345	Hartung, Jack B.	198
Deuterium, Primordial	248	Electricity	105, 245	Folstein, Marshall F.	345	Hawk	391
Developing nations	86, 233, 423	Electroconvulsive therapy	105	Food brooding	265	Hawking, Stephen S.	214
Dewey, Michael	60	Embryo division	105	Food restriction	54	Haycock, Christine E.	359
Diabetes	182, 261	Emotional disturbances	101	Food safety laws	119, 150	Hayes, James E.	22
Diabetes, Juvenile	357	Emotional problems	134	Food shortage	118	Hazardous wastes	68, 265, 337, 343, 348
Diabetes genes	85	Endal, Andrew S.	130	Food web	250	Haslewood, Carlton F.	381
Diazepam	85	Endangered species	55	Footprints, Hominid	196	Health care, Preventive	293
Dickson, Jesse H.	302	Endangered Species Act	246	Ford, Holland	277	Health care, Wholistic	359
Dieldrin	391	Endangered species treaty	246	Fordyce, Wilbert E.	332	Health habits, American	293
Dienestrol	326	Endocrine system cancer	309	Forbes, Patricia	119	Health policy, International	86
Diet, Calorie-restrictive	54	Endorphin		Formaldehyde, Megahertz	204	Heart attacks	201, 247
Diet, High-fat	411	See also: Beta endorphin		line of	8	Heart disease	135, 156
Diet, High-fiber	411	Endorphins	322	Forsyth, D. J.	391	Heart stopping	380
Diethylstilbestrol	326	Endothelial cells	342	Forsyth, James M.	324	Hedges, Ken	402
Dihydrotestosterone	328	Engel, Thorkild J.	299	Fossil, Biochemical	70	Hefetz, Abraham	329
Dimethyl nitrosamine	40	Engen, Trygg	283	Fossil, Animals	311	Heidelberger, Charles	411
Dinosaur extinction	356	Enkephalins	200	Fouts, Roger	73, 184	Heilmann, J. M.	402
Dirigibles	41	Enterogastone	57	Fowler, L. A.	116	Hellum	312
Disasters, Natural	134	Enzyme-based photographic film	121	Fractional charge, Electrical	38	Henry, James F.	333
Disclipio, William J.	167	Epidemiologists	168	Francheteau, J.	152	Hen's diet	244
Disease risk	21	Epstein, Melvin	237	Frank, B.	281	Hepatitis B Vaccine	248
Distler, Donald	68	Erhard, Werner	300	Frankel, A. D.	75	Hepatitis vaccine	344
Diterpene	313	Erhard Seminars Training	300	Frankel, Richard B.	270	Herbst, Robert	246
Dmowski, W. Paul	135	Erickson, R.	248	Frankel, Robert D.	324	Hermit crabs	394
Doane, William	121	Erickson, Raymond L.	344	Frederick, Calvin	134	Herpes infections treatment	375
Dockhorn, Robert J.	328	Erickson, Jonathan E.	293	Fredrickson, Donald	151	Herring, W. Conyers	310
Doctors, Emotionally disturbed	25	Esposito, L. W.	372	Free-electron laser	329	Herzenberg, Leonard A.	230
Dog litter	297	Esposito, Pasquale B.	393	Fried, William J.	308	Herzog, Gary A.	268
Dogs, Female	394	Estuaries	185	Friedhoff, Arnold J.	182	Heston, Leonard	285
Dolphins	200	Ethanol	404	Friedman, Gary D.	102	High Energy Astronomy	
Donahue, Thomas	100	Ethics in Government Act	103	Friedman, Gerald M.	343	Observatories	
Donati, Edward J.	326	Europe	147, 164, 231, 391	Friedman, Gerald M.	9	See also: Satellites, HEAO-1, 2	
Dopamine-containing brain graft	308	European Space Agency	359	Friedman, Gerald M.	9	High Energy Astronomy	
Dopamine receptors	182	Evans, Charles	390	Friedman, Gerald M.	9	Observatories	225, 229, 234
Douvan, Elizabeth	89	Evans, H. J.	133	Friedman, Gerald M.	9	Hilgard, Ernest R.	107
Dow Chemical Company	166	Evolution, Human	362	Friedman, Gerald M.	9	Hirabayashi, H.	8
Downbursts	170	Examinations, College	56	Friedman, Gerald M.	9	Hirschberg, David	185
Downdrafts	170	Eye contact, Strangers	9	Friedman, Gerald M.	9	Hist, Frank	268
Drake, Robert E.	363	Eye disorders	69	Friedman, Gerald M.	9	Hoecker, Walter	7
Drash, Allan L.	357	Eye drug delivery	102	Friedman, Gerald M.	9	Hoefer, Roger R.	402
Drayton, William, Jr.	422	Eye fluid, Synthetic	280	Friedman, Gerald M.	9	Hoffer, Barry J.	308
Dreier, Robert	297	Eye orbital pain	69	Friedman, Gerald M.	9	Hollinshead, Ariel	248
Drinkers, Modest	280			Friedman, Gerald M.	9	Hollis, Donald P.	381
Drug delivery	102			Friedman, Gerald M.	9	Holm, Dale	30
Drug hallucinations	106			Friedman, Gerald M.	9	Holt, Stephen	229
Drug metabolism	21			Friedman, Gerald M.	9	Holton, Gerald	217
Drugs, Antipsychotic	345			Friedman, Gerald M.	9	Holzer, Thomas L.	201
Drugs, Developing nations	86			Friedman, Gerald M.	9	Hominid, Plio-Pleistocene	328
Drugs, Psychotropic	345			Friedman, Gerald M.	9	Hominids, Pliocene	362
Drugs, Hazardous wastes	68			Friedman, Gerald M.	9	Homo habilis	252
Dryer, Randall F.	87			Friedman, Gerald M.	9	Homosexuality	275
Dueser, Raymond D.	11			Friedman, Gerald M.	9	Honda, Kenichi	245
Dueser, William H.	325			Friedman, Gerald M.	9	Hormone, Growth	39
Dufour's gland	329			Friedman, Gerald M.	9	Horwitz, Paul	84
Dunkin, J.	187			Friedman, Gerald M.	9	Hosobuchi, Yoshio	38
Dumping, Midnight	348			Friedman, Gerald M.	9	Hospital patients	345
Dumps, Abandoned	337, 348			Friedman, Gerald M.	9	Hovit, D. I.	381
Dunford, R.	89			Friedman, Gerald M.	9	Hovormale, John B.	390
Dunham, Edward	406			Friedman, Gerald M.	9	Howell, F. Clark	132, 365
Durkin, John A.	421			Friedman, Gerald M.	9	Hoyt, D. V.	393
Durrett, John	71			Friedman, Gerald M.	9	Hrubec, Zdenek	135
Dworkin, Larry	204			Friedman, Gerald M.	9	Hsia, Stephen	280
				Friedman, Gerald M.	9	Huey, Leighton Y.	345
				Friedman, Gerald M.	9	Huggins, Charles B.	262
				Friedman, Gerald M.	9	Hughes, John	120
				Friedman, Gerald M.	9	Hulett, Arnold Capriles	328

Humpback whale ..... 17, 25  
 Hunt, Garry E. .... 147, 172, 276  
 Huntington's disease ..... 308  
 Husbands ..... 73  
 Hybritech Inc. .... 262  
 Hydrogen, Metallic ..... 156  
 Hydrogen, Solid ..... 156  
 Hyman, Ray ..... 84  
 Hyperactivity ..... 89, 345  
 Hyperthermia, Whole body ..... 168  
 Hypnotism ..... 332

## I

IQ ..... 230  
 Ice age ..... 22  
 Ichikawa, Sadao ..... 329  
 Imipramine ..... 340  
 Immune responses ..... 295  
 Immune suppression ..... 105  
 Immune system ..... 136  
 Incineration, Ocean ..... 265  
 Indians, Prehistoric ..... 328  
 American ..... 328  
 Indium 115 ..... 103  
 Indoles ..... 411  
 Industrial innovation ..... 423  
 Infants ..... 423  
 Mothers' voices ..... 56  
 Premature ..... 181  
 Sudden death ..... 57  
 Vision ..... 152  
 Influenza, Type A ..... 168  
 Influenza vaccine ..... 375  
 Infrared spectrum ..... 406  
 Infrared telescope ..... 341  
 Inge, Jay L. .... 391  
 Ingersoll, Andrew ..... 147  
 Ingvar, David ..... 285  
 Insect defense ..... 321, 330  
 Insecticides ..... 266  
 Inst. for Scientific & Tech-  
 nological Cooperation ..... 279  
 Insulin pump ..... 182  
 Internal Revenue Service ..... 168  
 Intestine, Small ..... 152  
 Intoxication ..... 70  
 Inventory ..... 30  
 Inversion, East Coast ..... 388  
 Iodine ..... 147, 161, 162, 371, 385, 391, 396  
 Ion beams ..... 197  
 Ionosphere ..... 756  
 Ireland ..... 152  
 Iridium ..... 356  
 Islands, Barrier ..... 1, 10  
 Islet transplantation ..... 261  
 Iwanow, Georgi ..... 263  
 Iwasaki, Wayne T. .... 265  
 Ixodes dammini ..... 391

## J

JADE ..... 186  
 Jacob, Klaus ..... 377  
 James, Philip B. .... 276  
 Janowski, David S. .... 345  
 Janusian thinking ..... 216  
 Japan ..... 185, 279  
 Jarrett, H. S. .... 245  
 Jason, Leonard A. .... 297  
 Javits, Jacob K. .... 87  
 Jaw, Fossilized ..... 310  
 Jericho ..... 377  
 Jobholders, Federal ..... 103  
 Johnson, Donald Carl ..... 36, 196, 362  
 Johnson, Torrence ..... 109, 172  
 Johnson, Virginia E. .... 275  
 Johnstone, Eve ..... 325  
 Jones, Howard W. .... 325  
 Jones, Kenneth ..... 53  
 Jones, Meredith L. .... 231  
 Jones, Robert E. .... 25  
 Jordan, Alec ..... 404  
 Jordan, Bill ..... 204  
 Jordan River ..... 377  
 Jorling, Thomas ..... 350  
 Jostein, H. .... 57  
 Juarez, Chuck ..... 27  
 Jue, Lewis L. .... 345  
 Jugaku, J. .... 8  
 Jupiter ..... 164  
 Aurora ..... 164  
 Barge ..... 164  
 Electrons ..... 25  
 Five-micron band ..... 164  
 Infrared telescope ..... 341

Lightning ..... 164, 231, 312  
 Magnetic tail ..... 371  
 Mains ..... 108, 385, 391, 396  
 Indexed by name also ..... 108  
 Photographs ..... 108  
 145, 147, 161, 164, 371  
 Red Spot ..... 164, 371  
 Ring of particles ..... 147, 164, 259  
 Voyager 1 ..... 108  
 145, 147, 161, 164, 294, 371  
 Voyager 2 ..... 294, 371  
 Jurd, Leonard ..... 280

## K

Kahn, C. Ronald ..... 182  
 Kanamori, Hiroo ..... 76  
 Kane, Jonathan ..... 167  
 Kane, William J. .... 302  
 Kaplan, Joel N. .... 283  
 Kaplan, Marshall H. .... 85  
 Kardashev, N. S. .... 181  
 Karow, Armand M., Jr. .... 24  
 Kass, Irving ..... 244  
 Katz, Barbara F. .... 358  
 Katz, Jonathan ..... 277  
 Kaufman, M. H. .... 69  
 Kearns, Thomas P. .... 40  
 Keefe, Larry ..... 169  
 Kellman, Robert ..... 57  
 Kelly, Dorothy ..... 292  
 Kemény, John ..... 72  
 Kendall, Henry ..... 86, 119, 150  
 Kennedy, Donald ..... 309  
 Kennedy, Edward M. .... 377  
 Kennedy, Harriet ..... 70  
 Kent, Dennis V. .... 360  
 Kerogen ..... 325  
 Kerr-McGee Corporation ..... 181  
 Kety, Seymour S. .... 185  
 Kidney failure ..... 324  
 Kikuchi, Ken ..... 264  
 Kinetic studies ..... 361  
 King, Theodore K. .... 9  
 Kirsch, Jeffrey ..... 133  
 Klagsburn, Michael ..... 280  
 Klausner, Melville ..... 413  
 Klayman, Daniel L. .... 340  
 Klee, Victor ..... 70  
 Klein, Donald F. .... 277  
 Klein, William R. .... 44  
 Klemola, Arnold ..... 297  
 Kneale, George ..... 42  
 Ko, Malcolm K. W. .... 120  
 Kondratenko, A. M. .... 270  
 Kosterlitz, Hans ..... 75  
 Kotov, V. A. .... 136  
 Krause, Janet ..... 390  
 Krebs, John ..... 327  
 Kremer, Henry ..... 414  
 Kristof, Emory ..... 315  
 Krutchevsky, David ..... 314  
 Kruger, Art ..... 121  
 Krumpe, Paul ..... 169  
 Kuan, Ken ..... 212  
 Kuhn, Peter ..... 89  
 Kuhn, Thomas S. .... 402  
 Kulk, Richard ..... 252  
 Kumeyaay Indians ..... 135  
 'Kung ..... 41  
 Kunzmann, Michael R. .... 277  
 Kuru ..... 117  
 Kwitter, Karen ..... 33, 42  
 Kyle, Philip ..... 329  
 Laboratory flies ..... 405  
 Laboratory practice rules ..... 261  
 Lacy, Paul E. .... 196  
 Laetoli footprints ..... 196  
 Laetoli fossils ..... 71, 422  
 Laetrile ..... 343  
 Lake, Stratified ..... 56  
 Lake-level changes ..... 235  
 Lake Mendocino ..... 329  
 Lamb, Frederick K. .... 121  
 Laminates ..... 152  
 Lampetia 393 ..... 405  
 Land, Charles ..... 261  
 Landslides ..... 38  
 Lapore, Paul ..... 185, 329  
 Larson, Stephen M. .... 324  
 Laser, Free-electron ..... 57, 392  
 Laser, Glass development ..... 406  
 Laser fusion ..... 342  
 Lasers ..... 342

Lasker awards ..... 120  
 La Soufrière ..... 305, 314  
 Lassa fever ..... 136  
 Latarjet, R. .... 41  
 Lauterbur, Paul ..... 380  
 Lava lakes, Io ..... 164  
 Lave, Lester ..... 245  
 Lavigne, David M. .... 202  
 Lawson, Alvin H. .... 107  
 Lawson, David M. .... 56  
 Lazell, James D. .... 11  
 Leacock, R. J. .... 57  
 Lead exposure ..... 230  
 Lead hazard ..... 293  
 Leakey, Mary D. .... 36, 196, 362  
 Leakey, Richard ..... 362  
 Learning deficits ..... 404  
 Lederman, L. M. .... 136  
 Lee, James ..... 233  
 Lee, Y. Y. .... 121  
 Leeper, Ed ..... 263  
 Leg gland ..... 394  
 Legionnaires' disease ..... 4, 9, 41  
 Lehner, Yolanda ..... 135  
 Leibrock, Lyl ..... 237  
 Lemur, Madagascan ring-tail ..... 390  
 Lesch-Nyhan syndrome ..... 42  
 Lesh, Janet R. .... 60  
 Leslie, R. D. G. .... 420  
 Leukemia ..... 263  
 Leukemia, Childhood ..... 133  
 Leukotrienes ..... 392  
 Levi-Montalcini, Rita ..... 264  
 Levin, Donald ..... 8  
 Levy, Robert I. .... 156  
 Lewin, Ralph A. .... 247  
 Lewis, Brian T. R. .... 402  
 Li, Su ..... 313  
 Life, Extraterrestrial ..... 8, 180  
 Life, Quality of ..... 105  
 Lifespan-diet link ..... 54  
 Lifton, Robert J. .... 184  
 Light-sensitive material ..... 7  
 Lightning ..... 393  
 Earth patterns ..... 164, 231, 312  
 Jupiter ..... 4  
 Venus ..... 357  
 Liller, William ..... 105  
 Lindner, Hans ..... 90  
 Liquefaction ..... 232, 345  
 Lithium ..... 30  
 Livestock monitoring ..... 10  
 Livingston, Robert ..... 200  
 Loch Ness Monster ..... 201  
 Lofgren, Ben E. .... 410  
 Logan, B. G. .... 89  
 Loney, Jan ..... 237  
 Long, Donlin ..... 363  
 Lovejoy, C. Owen ..... 410  
 Lovelace, Richard ..... 376  
 Lowenkopf, Eugene L. .... 392  
 Lubin, Moshe ..... 37  
 Lubin, Philip M. .... 180  
 Luminosity, Storage ring ..... 198  
 Lunar and Planetary Science Conference ..... 198  
 Lunar exploration, Future ..... 198  
 Lunar Observatory, Polar ..... 198  
 Orbiting ..... 198  
 Lunar Polar Orbiter, U.S. .... 198  
 Lunar satellite cycle ..... 402  
 Lungs ..... 295  
 Luxon, J. L. .... 410  
 Lyakhov, Vladimir ..... 135  
 Lyme arthritis ..... 87, 391  
 Lymphotoxin molecules ..... 136  
 Lyon, Joseph ..... 133  
 Lyons, Walter A. .... 388

## Mc

McCall, W. C. .... 107  
 McCann, William R. .... 75, 377  
 McClintock, Martha ..... 282  
 McCormick, Pat ..... 315  
 McCulloch, P. M. .... 116  
 McCurdy, Dave ..... 405  
 McGraw, J. .... 257  
 McLachlan, John A. .... 326  
 McLennan, S. M. .... 232  
 McNaughton, James L. .... 344

## M

MacDoran, Peter F. .... 58  
 MacMillan, J. F. .... 325  
 MacMillan, John H. .... 292  
 Madden, Denis J. .... 358  
 Magnetic activity ..... 201

Magnetic dust ..... 295  
 Magnetic fields, Human body ..... 295  
 Magnetic insulation ..... 410  
 Magnetic mirrors, Tandem ..... 410  
 Magnetite ..... 278  
 Magnetotactic bacteria ..... 278  
 Maize ..... 24  
 Malagasy ..... 387  
 Malaria ..... 41  
 Malaria resistance ..... 21  
 Malawista, Stephen ..... 391  
 Malignancy ..... 344  
 Malin, S. R. C. .... 201  
 Man, Early ..... 311  
 Alaska ..... 132  
 Cro-Magnon ..... 241, 252  
 Culture ..... 93  
 Mancuso, Thomas G. .... 391  
 Manes, K. R. .... 404  
 Manes, Michael ..... 88  
 Mangold, Katharina ..... 280  
 Manners, G. D. .... 381  
 Mansfield, Peter ..... 156  
 Mao, Ho-kwang ..... 412  
 Map, Four-color problem ..... 277, 357  
 Margon, Bruce ..... 297  
 Marijuana ..... 189  
 Marine algae ..... 186  
 Marmor, Judd ..... 275  
 Mars ..... 276  
 Cyclone-like clouds ..... 53  
 Dust storms ..... 22  
 Future exploration ..... 53, 198, 343  
 Viking project ..... 357  
 Marsden, Brian G. .... 252, 357  
 Marshack, Alexander ..... 150  
 Martin, Malcolm ..... 357  
 Martin, P. G. .... 54  
 Masoro, Edward J. .... 140  
 Masserman, Jules H. .... 389  
 Mastectomies, Modified radical ..... 275  
 Masters, William H. .... 101  
 Mastroianni, Luigi, Jr. .... 373  
 Masursky, Harold ..... 156  
 Matanoski, Genevieve ..... 297  
 Matese, Francis ..... 153  
 Mathews, William S. .... 326  
 Matinian, Levon A. .... 73  
 Matson, Michael ..... 280  
 Matsuzawa, Yasuo ..... 345  
 Mattes, Jeffrey ..... 341  
 Mauna Kea telescope ..... 8  
 May, Robert M. .... 402  
 Mayas ..... 218  
 Mayr, Ernst ..... 70  
 Mayr, W. R. .... 267  
 Mayse, Mark ..... 89  
 Me generation ..... 232  
 Meagher, Jeanette R. .... 120  
 Medical awards ..... 153  
 Medical school ..... 152  
 Mekhjian, Hagop S. .... 121  
 Melnick, J. .... 136  
 Memory, Odor ..... 282  
 Meniscus ..... 377  
 Menstrual cycles ..... 282  
 Synchronized ..... 293  
 Mental health ..... 327  
 Mental Health Systems Act ..... 129, 140  
 Mental illness, China ..... 134  
 Mental patients ..... 392  
 Mental problems ..... 202  
 Menzies, Robert ..... 23, 25  
 Mercer, Mac ..... 390  
 Meredith, Michael ..... 281  
 Metals, Heavy ..... 374  
 Metamorphosis ..... 324, 424  
 Meteorite impacts ..... 117  
 Meteorites, Antarctic ..... 312  
 Methane automobile ..... 409  
 Methanol ..... 309  
 Methapyrene ..... 169  
 Methyl chloroform ..... 135  
 Methyl p-hydroxybenzoate ..... 121  
 Methyl parathion ..... 227  
 Methylomonas ..... 326  
 Metropolitan Edison ..... 326  
 Metzler, Manfred ..... 136  
 Mice, African ..... 60  
 Mice, Chimeric ..... 391  
 Mice, Mosaic ..... 282  
 Mice, White-footed ..... 356  
 Michael, Richard P. .... 266  
 Michel, Helen V. .... 51  
 Microbials ..... 237  
 Microelectronics ..... 248

Microorganism patents ..... 69, 237  
 Microsurgery ..... 232  
 Microtektites ..... 30  
 Microwaves, Monitoring with ..... 70  
 Mikeska, Joseph A. .... 9  
 Milk, Mother's ..... 197, 388  
 Milky Way ..... 101  
 Miller, Elizabeth C. .... 169  
 Miller, John E. .... 375  
 Miller, Joseph B. .... 284  
 Miller, Nancy ..... 24  
 Milner, Joel S. .... 357  
 Milone, E. F. .... 298  
 Milwaukee brace ..... 152  
 Mineral deposits ..... 247, 264  
 Miners, Health effects ..... 60  
 Mintz, Bestrice ..... 375  
 Mitchell, O. Robert ..... 377  
 Mitochondrial gene mutation ..... 60  
 Mogi doughnut ..... 275  
 Molinaux, Louis ..... 262  
 Money, John ..... 168  
 Monoclonal antibodies ..... 23, 198, 402  
 Moon ..... 186  
 Moonrock ..... 198  
 Moore, David G. .... 268  
 Moore, Leon ..... 351  
 Moorman, James W. .... 165  
 Morabito, Linda ..... 172  
 Morgan, J. S. .... 42  
 Morgan, Robert P. .... 252  
 Morimoto, M. .... 148  
 Morphy, Howard ..... 374  
 Morrison, David ..... 41  
 Morse, Daniel E. .... 152  
 Morse, Francis ..... 6, 9  
 Morton, Douglas M. .... 21  
 Moss, John E. .... 152  
 Moulis, Arno G. .... 152  
 Mowflous ..... 182  
 Muggeo, Michele ..... 394  
 Muller-Schwarze, Dietland ..... 189  
 Mumma, Ralph ..... 134  
 Muons conservation ..... 357  
 Murchison, P. G. .... 75  
 Murphy, A. J. .... 262  
 Murray, Patrick ..... 344  
 Mushock, Richard ..... 234  
 Mutations, Nonsense ..... 88  
 Mutch, Thomas A. .... 359  
 Myasthenia gravis ..... 102

## N

NASA ..... 33  
 Inner planet exploration ..... 5  
 Launch schedule 1979 ..... 359  
 Science chief ..... 359  
 NGU ..... 359  
 NIH ..... 121  
 See: National Institutes of Health  
 NMR scanning ..... 380  
 NMR spectroscopy ..... 378, 380  
 NOAA satellites ..... 312  
 "NOVA" ..... 361  
 Naeys, Richard L. .... 55  
 Nag, Bartholomew ..... 70  
 Naito, R. .... 280  
 Naito, Herbert K. .... 280  
 Nakajima, Taiichi ..... 246  
 Nash, Douglas B. .... 372  
 Nason, Robert D. .... 75, 91  
 Natarajan, Murali ..... 405  
 National Academy of Sciences ..... 40  
 National Institutes of Health ..... 278  
 National Science Foundation ..... 51, 325  
 National Wildlife Federation ..... 105  
 Neal, Stephen L. .... 421  
 Neely, John E. .... 405  
 Neanderthal man ..... 132  
 Needham, H. D. .... 152  
 Needleman, Herbert L. .... 230  
 Neel, James V. .... 118  
 Ne'eman, Yuval ..... 214  
 Nelson, Robert M. .... 372  
 Nemesis, 128 ..... 121  
 Nerve cells ..... 264  
 Nerve growth factor ..... 264  
 Nerve regeneration ..... 326  
 Ness, Norman ..... 372  
 Neuroleptics ..... 182  
 Neurological disorders ..... 308  
 Neurosurgery ..... 237



